REMARKS/ARGUMENTS

Applicant has carefully reviewed and considered the Office Action mailed on June 11, 2004, and the references cited therewith.

Claims 1 and 21 are amended, claims 33 and 34 are added, and no claims are canceled; as a result, claims 1-34 are now pending in this application.

Applicant respectfully submits that claims 33 and 34 do not introduce any new subject matter and are intended to cover additional claimable subject matter fully supported by the originally filed specification.

§102 Rejection of the Claims

Claims 1-4, 8-10, 12-17, 29, and 30 were rejected under 35 USC §102(e) as being anticipated by Hirai, et al. (U.S. Patent Publication No.US/2003/0047729).

Applicant does not admit that the Hirai reference is indeed prior art and reserves the right to swear behind the reference at a later date. Nonetheless, Applicant believes the presented claims are distinguishable from the Hirai reference for at least the following reasons.

Independent Claim 1

Applicant's independent claim 1, as amended recites, besides other things,

> selectively ablating one or more of the semiconductor solution-processed thin film active regions and the dielectric solution-processed thin film isolations to pattern or complete patterning of a material being selectively ablated, wherein said step of selectively ablating is carried out during or after said step of forming.

The Examiner asserts that the Hirai reference describes selectively ablating the semiconductor solution-processed thin film active regions and the dielectric solution-processed thin film isolations. Applicant respectfully submits the Hirai reference fails to describe all the elements recited in claim 1, as amended.

The Hirai reference appears to describe forming a gate, source, and/or drain electrodes using laser ablation, among other methods. In contrast,

Applicant's independent claim 1, as amended, recites selectively ablating one or more of the semiconductor solution-processed thin film active regions and the dielectric solution-processed thin film isolations. The active regions and the isolations, as defined in Applicant's specification, are not gate, source, or drain electrodes.

The Applicant was unable to locate, anywhere in the Hirai reference, a description of selectively ablating one or more of the semiconductor solution-processed thin film active regions and the dielectric solution-processed thin film isolations. As such, Applicant respectfully submits that each and every element of Applicant's independent claim 1, as amended, is not described in the Hirai reference. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the §102 rejection for independent claim 1, as well as those claims which depend therefrom.

Independent Claim 29

The Examiner asserts that the Hirai reference describes depositing in a rough pattern, the drain and source contacts, and refining the rough pattern by selective laser ablation of the drain and source contacts. The Examiner cited Figure 1(B) and Page 3, Paragraph 0056 through Page 9, Paragraph 0134 to support this assertion.

The only location in the Hirai reference that addresses laser ablation is on Page 5, Paragraph 0064. In that paragraph, the Hirai reference describes "Said electrode may also be formed in such a manner that a coated layer is subjected to lithograph or laser ablation."

In contrast, Applicant's independent claim 29 recites, besides other things,

> depositing, in a rough pattern, the drain and source contacts, and refining the rough pattern by selective laser ablation of the drain and source contacts.

The Applicant respectfully submits that the Hirari reference does not teach, depositing in a rough pattern, the source and drain contacts, and refining the rough pattern by selective laser ablation. As such, Applicant respectfully submits that each and every element of Applicant's independent claim 29 is not described in the Hirai reference. Accordingly, Applicant respectfully requests

reconsideration and withdrawal of the §102 rejection for independent claim 29, as well as those claims which depend therefrom.

§103 Rejection of the Claims

Claim 11 was rejected under 35 USC §103(a) as being unpatentable over Hirai, et al. (U.S. Patent Publication No.US/2003/0047729). Claim 11 depends from independent claim 1. Accordingly, Applicant asserts that claim 11 is deemed allowable upon the basis discussed above.

Claims 18-24, 27, 28, 31, and 32 were rejected under 35 USC §103(a) as being unpatentable over by Hirai, et al. (U.S. Patent Publication No. US/2003/0047729) in view of Kian, et al. (U.S. Patent No. 6,602,790).

Independent Claim 21

Applicant's independent claim 21, as amended, recites besides other things,

> forming solution-processed thin film layers into a transistor structure, wherein the transistor structure includes a semiconductor solution-processed thin film active region, and a dielectric solution-processed thin film isolation; and
>
> during said forming, patterning portions of the transistor structure via laser ablation, using laser wavelength tuned to be absorbed by material being patterned and to minimally damage material underlying material being patterned.

For the reasons provided above, Applicant submits that independent claim 21, as amended, is distinguishable from the Hirai reference. That is, the Hirai reference does not describe patterning, via laser ablation, portions of the transistor structure, which include conductive solution-processed thin film contacts, semiconductor solution-processed thin film active regions, and dielectric solution-processed thin film isolations. The Kian reference does not cure the deficiencies of the Hirai reference. The Kian reference appears to describe laser ablation of a conductor layer on a plastic substrate to form a plurality of electrodes from the conductor layer. (See Col. 11, Lines 15-26). The Kian reference does not teach or suggest forming solution-processed thin film layers into a transistor structure, wherein the transistor structure includes semiconductor solution-processed thin film active regions, and dielectric

solution-processed thin film isolations, and during said forming patterning portions of the transistor structure via laser ablation.

As such, each and every element and limitation are not provided in the references, either independently or in combination, to support a §103 rejection of claim 21, as amended. Accordingly, reconsideration and withdrawal of the §103 rejection for independent claim 21, as well as those claims which depend therefrom is respectfully requested.

Claims 18-20, 22-24, 27, 28, 31, and 32 are dependent upon independent claims 1, 21, or 29. Accordingly, Applicant asserts that claims 18-24, 27, 28, 31, and 32 are deemed allowable upon the basis discussed above.

Allowable Subject Matter

Claims 5-7, 25, and 26 were objected to as being dependent upon a rejected base claims, but were indicated to be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicant thanks the Examiner for allowing claims 5-7, 25, and 26.

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at (360) 212-8052 to facilitate prosecution of this matter.

At any time during the pendency of this application, please charge any additional fees or credit overpayment to the Deposit Account No. 08-2025.

CERTIFICATE UNDER 37 CFR §1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: **MS AMENDMENT** Commissioner for Patents, P.O. BOX 1450, Alexandria, VA 22313-1450 on this ____ day of _____, 2004.

Sarah L. Reinhard
Name

Sarah L. Reinhard
Signature

Respectfully Submitted,
Jian-gang Weng, et al.

By their Representatives,
E.J. BROOKS & ASSOCIATES, PLLC
1221 Nicollet Avenue, Suite 500
Minneapolis, MN 55403

By: _____
Jeffery L. Cameron
Reg. No. 43,527

Date: 9/7/04